

Pest Update (May 19, 2010)

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Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Plant development for the growing season

We are still ahead of last year though this cooler weather has slowed development down a bit. We are still seeing plants in bloom that often do not flower at the same time; peashrub, buffalo currant, crabapple and common lilac are all in bloom.

Treatments to do now



Clearwing ash borer treatments with a permethrin product can be applied now. These chemicals are applied as trunk sprays along the lower 10 feet of the trunk and should *not* be applied as soil drenches. The borers are beginning to fly as evident by the pencil size holes along the trunks of infested ash trees. The holes may have pupal skins still attached to them. The first flights are typically males with the females beginning to fly and lay eggs about

a week from now so there is still time to spray.



Rhizosphaera needlecast is a common spruce disease in our state. The symptoms of the disease are last year's needles becoming discolored, often a purplish-brown to brown, and older needles starting to be cast from the tree. The disease does not kill the tree but will result in significant defoliation and thinning, some trees only are left with a thin shell of foliage. The disease can be managed with two applications of a fungicide containing

chlorothalonil, the first application applied as the new growth has expanded, essential now, and another three weeks later. These applications will protect the new foliage from infection but not older, already infected, foliage so still expect to see needles fall from the tree this year regardless of that is done. If a tree is treated this year, the application should significantly reduce the injury next year. There are several other pathogens that have symptoms and fruiting bodies that appear very similar to *Rhizosphaera*, most notably *Stigmina*, and it is always a good idea to confirm a diagnosis before beginning treatments.

Spruce spider mites become active now as silver maple leaves are expanding. Spruce spider mites are cool season mites meaning they are active in the spring and fall, not during the summer heat. The mites will go dormant once the temperatures consistently reach into the mid 80's. While the mites will begin feeding soon, the damage to the needles, bronzing and browning, does not typically show up until summer just as the mite populations begin to decline. Treatment options are very limited for homeowners, horticultural oils and insecticidal soaps being the two most common. These are really suppression treatments, not eradication, and the webbing often prevents these pesticides, particularly the soap, from penetrating. They should be applied now and then another treatment next week, about 7 to 10 days after the first treatment to kill the mites as they hatch from eggs. Be aware of the cautions to the use of these products, particularly for spruce, as applications of oils or soaps can result in the

loss of blue or silvery color to the foliage. You can make a *blue* spruce, a *green* spruce, very quickly, so read and follow label directions very carefully. The other common spray has the active ingredient acephate but this kills more than mites and sometimes has limited effectiveness. Insecticides containing this active ingredient are also becoming difficult to find in our state, Ortho Systemic Insect Killer is the most common and only a few distributors in the state still have this product on their shelves. Acephate should also be applied in two treatments spaced 10 days apart.

There are a number of products that provide excellent control and have minimal impact on non-target organisms but these are only commercially available. However, it would be worth the time and money to have a commercial applicator provide these treatments considering the effectiveness of these products versus those available to homeowners. This is one pest it is far better to pay for a professional than attempt to do it yourself.

Current concerns



As predicted, I am receiving e-mails about ash and hackberries dropping their leaves and appearing sparse. The cold snap caught many ash and hackberries just as the leaves were coming out. When this happens, and it did last year as well, the ground is soon littered with small, partially developed leaves. While it may appear alarming, ash and hackberries quickly put out additional leaves and usually by the end of May no one can even tell that the tree was defoliated earlier in the year.



Ash anthracnose is also a factor in the defoliation of many ash trees in the state. I have received pictures of spotted and distorted ash leaves that are littering the ground beneath almost completely defoliated trees. Some people comment that it looks almost like autumn there are so many leaves on the ground. Ash anthracnose is a fungal disease that appears when we have a time period in May that is cool and wet, the perfect environmental conditions for the disease to develop. Infected leaves soon develop brown spots that enlarge to become blotches and these leaves may also become distorted. The leaves usually begin falling before they completely develop so the ground beneath the tree is covered with small leaves. While there are fungicide treatments to protect trees from infection, the applications must be made before the symptoms appear, now is too late for treatment. Fortunately,

the infected trees usually put new leaves out by early June and since the weather is often warmer and drier no new infections occurs.

Emerald Ash Borer Updates

This past week emerald ash borer (EAB) was found in an ash tree in northeastern Iowa. This is not too surprising as the insect was found on the Wisconsin side of the river last year and then just to the north on the Minnesota side of the river this spring. While this is another report of the insect expanding west, it is not a cause for alarm in South Dakota. The infested tree is still hundreds of miles from our state and while I am certain we'll receive reports some day of closer infestations and eventually it will reach our state, it is really too early to begin control measures. The pesticides that are most effective for controlling the insect are expensive and there is little value in beginning treatments "just in case." In addition, the use of these pesticides may have other drawbacks such as increasing the populations of other insects or wounding the tree, acceptable if needed to control an infestation but probably not as a "just in case" treatment. Many authorities in other states are taking the approach that treatments are warranted only when the emerald ash borer is detected in an adjacent county and so far none of the counties even close to our state's border have a confirmed infestation. Iowa is recommending only beginning treatments for the borer if there is a confirmed infestation within 15 miles so we (hopefully) have a long time to go. The best approach for managing the insect in our state is to be aware of the symptoms associated with an EAB attack and report any trees or stands of trees that have these symptoms to your local Cooperative Extension educator or Department of Agriculture forester. However, you want to be sure to only report ash trees that are expressing symptoms and not confuse EAB attacks with those of the clearwing ash borer, carpenterworm or other common borers of ash. Training in identify possible EAB infestations will be conducted through our detector program.

Emerald Ash Borer First Detector Program coming to South Dakota

The threat of emerald ash borer, along with other potential threats such as the Asian longhorned beetle and thousand canker disease of walnut has created the need to develop a force of volunteers that are trained to identify these pests. As these pests come closer to our state, Cooperative Extension educators and Department of Agriculture foresters may become overwhelms with requests from the public to "come out and look at my tree." Volunteers can provide a valuable first line by conducting site visits and either determining the tree is not infested or requested that the educator, foresters or other resource professional needs to examine the tree to determine if it may be infested with emerald ash borer or other exotic pests. There will be one day training sessions – 9 am to 3 pm - tentative set in Aberdeen (6/28), Pierre (7/1), Rapid City (6/23) and Sioux Falls (7/2) to train volunteers in identifying exotic pests and methods of collecting

samples. Regulatory issues and how to work with the public will also be discussed during the workshop. Anyone interested in possibly attending can email John Ball at john.ball@sdstate.edu to have an information packet send directly to them.

E-samples



I received this picture of Zimmerman pine moth damage this week. A common symptom of attack is pitch masses – globs of sticky creamy-brown pitch – found near where the branches connect with the trunk. I was out at windbreak earlier last week and most of the trees were covered with these pitch masses so it appear the insect numbers are on the upswing again. We had a major outbreak of this insect back in the early 90s and again in 2000. Infested trees usually are easy to spot from their broken branches and distorted stems. The insect is most commonly found in Austrian and ponderosa pines though occasionally Scotch pine and even spruce are attacked. There are three different Zimmerman pine moth species in South Dakota and while they appear similar they have different flight periods hence control times differ. The best two times to treat infested trees, regardless of the moth involved, are at the end of May and the middle of August. Insecticides containing permethrin are effective but the spray must reach the trunk, not just the foliage so a high-pressure spray is required.